

REMARKS

Applicant has carefully studied the outstanding Official Action in the present application. The present response is intended to be fully responsive to all points of rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Claims 3, 6, 25 and 27 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-10, 17-19, 23, 25 and 27 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 23, 25 and 27 stand rejected under 35 U.S.C. 102(b) as anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over Hewitt et al in light of Rick. Claims 1-2, 7, 9, 17-19, 23, 25 and 27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hewitt et al in light of [with] Rick, further in view of Dinar et al.

Applicants' express their appreciation to Examiner David T. Fox, for the courtesy of a telephone interview which was held on Wednesday December 18, 2002. In the course of the interview, both the 35 U.S.C. 112 rejections and the patentability rejections were discussed in detail. The foregoing amendments are intended to carry out the understandings reached in the course of the interview, namely that the claims would be limited to *Lycopersicon hirsutum* and to ADP-glucose pyrophosphorylase. This narrowing is believed to resolve all 35 U.S.C. 112 issues as well as the 35 U.S.C. 102 and 35 U.S.C. 103 issues inasmuch as experimental evidence relating to *Lycopersicon hirsutum* and to ADP-glucose pyrophosphorylase is present in the disclosure and is not shown or suggested in the prior art.

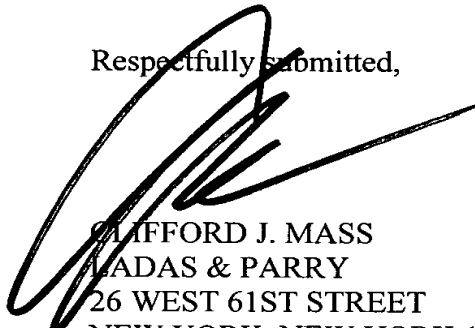
Claim 1 has been amended accordingly. All of the remaining claims depend directly or indirectly from claim 1 and recite additional patentable matter and are therefore deemed to be allowable. Additionally, claims 2, 3, 5-8, 25 and 27 have

been amended to overcome the Examiner's objections.

Additionally, the amendments to the specification, requested in the preliminary amendment of June 21, 2002, which were not accepted, have been resubmitted in the proper format as requested by the examiner. Further amendments to the specification have been submitted to comply with the Examiner's request for the removal of awkward language.

In view of the foregoing amendments, all of the claims are deemed to be allowable. Favorable reconsideration and allowance of the application is respectfully requested.

Respectfully submitted,

A large, stylized handwritten signature in black ink, likely belonging to Clifford J. Mass, is written over the typed name and address.

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APPENDIX – MARKED-UP COPY OF CLAIMS AS AMENDED

C L A I M S

1. (Amended) A method for controlling starch synthesis in tomatoes comprising:
providing a population of plants derived from interspecific crosses of *Lycopersicon hirsutum* [spp.] with *Lycopersicon esculentum* genotypes; and
selecting individuals of said population that each contain an allele of a gene that increases the activity of ADP-glucose pyrophosphorylase (ADPGPPase) [starch synthesis], said [gene] allele originating from said *Lycopersicon hirsutum* [spp].
2. (Amended) The method according to claim 1 wherein said step of selecting comprises selecting individuals that each contain the allele of the gene that encodes for a subunit of ADPGPPase [an enzyme that catalyzes a metabolic step in starch synthesis].
3. (Amended) The method according to claim 1 wherein said step of selecting comprises selecting individuals that each contain the allele of the gene that encodes for the large [a] subunit (LS1) of ADPGPPase.
4. (Cancelled)
5. (Amended) The method according to claim 1 wherein said step of selecting comprises selecting by using a molecular marker which is diagnostic for said gene.
6. (Amended) The method according to claim 5 wherein said molecular marker is diagnostic for a subunit of ADPGPPase [comprises step of selecting comprises a *Lycopersicon hirsutum*-derived large subunit (LS1) of ADPGPPase].
7. (Amended) The method according to claim 5[2] wherein said molecular marker is diagnostic for the large subunit (LS1) of ADPGPPase [step of selecting comprises selecting by measuring activity of said enzyme in young fruit and selecting those young

fruit with high activity of said enzyme].

8. (Amended) The method according to claim 1[2] wherein said step of selecting comprises selecting by measuring ADPGPPase activity of said young fruit, and selecting those young fruit with high ADPGPPase activity.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Unchanged) A method according to claim 1 and additionally comprising the step of propagating said individuals of said population.

18. (Unchanged) A method according to claim 17 wherein the step of propagating includes the step of vegetative propagation.

19. (Unchanged) A method according to claim 17 wherein the step of propagating includes the step of propagation by seed.

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Unchanged) A plant produced according to the method of claim 1.

24. (Cancelled)

25. (Amended) A fruit produced by the [a] plant of [in accordance with] claim 23.

26. (Cancelled)

27. (Unchanged) A seed which when grown yields the [a] plant of [in accordance with] claim 23.

28. (Cancelled)

31. (Cancelled)

32. (Cancelled)